

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims: Please amend the claims as follows:

We claim:

Claim 1. (Currently Amended) A method for presenting image data (1) that represents a three-dimensional object (7) in a space, comprising generating ~~wherein~~ projection data which represents a two-dimensional projection (6) of the object (7) ~~are generated by~~ computationally ~~computational~~ superimposing of multiple image planes, and displaying ~~wherein~~ the projection (6) ~~is displayed on a~~ monitor for viewing by a user, ~~characterised in that~~ wherein a sub-area (8) is selected from the projection (6) and, wherein a detail image (9) having different information content than the projection (6) is generated inside the sub-area (8), and displaying ~~wherein~~ the detail image (9) ~~is displayed within the~~ sub-area (8) on the monitor.

Claim 2. (Currently Amended) The method in accordance with claim 1, ~~characterised in that~~ wherein the detail image is generated in direct or indirect recourse to the image data (1) from which the projection is generated and, wherein this image data (1) is collected in a first data record.

Claim 3. (Currently Amended) The method in accordance with claim 1, further comprising ~~characterised in that~~ the user selecting ~~selects~~ one of several possible detail images (9); which differ in their information content, ~~particularly in the depth or and/or the perspective or and/or the type of display and/or the depth of information represented by the detail image (9).~~

Claim 4. (Currently Amended) The method in accordance with claim 1, ~~characterised in that~~ wherein a detail image (9) is a sub-projection (10) which differs from the projection ~~projections~~ (6) in that the depth of field is greater.

Claim 5. (Currently Amended) The method in accordance with claim 4, ~~characterised in that~~ wherein the plane (4) of the sub-projections (10) is parallel to the plane of the projection (6).

Claim 6. (Currently Amended) The method in accordance with claim 1, ~~characterised in that~~ wherein a separate window is opened on the monitor, in which various sections are displayed by the

object (7) within the frame of the selected sub-area (8).

Claim 7. (Currently Amended) The method in accordance with claim 1, ~~characterised in that~~
wherein a volume presentation or a surface display takes place in the separate window.

Claim 8. (Currently Amended) ~~he~~ The method in accordance with claim 1, ~~characterised in that~~
wherein fewer image planes (4) are superimposed when sub-projections (10) with higher depth of field
are generated than when projections (6) are generated.

Claim 9. (Currently Amended) The method in accordance with claim 1, ~~characterised in that~~
wherein exactly one image plane (4) represents a sub-projection (10).

Claim 10. (Currently Amended) The method in accordance with claim 1, ~~characterised in that~~
wherein the user has interactive access to the image information in the sub-area (8) by moving a pointer
instrument to scroll among different layers parallel to the projection planes.

Claim 11. (Previously Presented) The method in accordance with claim 1, ~~characterised in that~~
wherein the image data represents a part of a human or animal body and is recorded with a diagnostic
system.

Claim 12. (Currently Amended) The method in accordance with claim 11, ~~characterised in that~~
wherein the image data is recorded with a computer tomograph (CT), a magnetic resonance tomograph
(MR), or by digital volume tomography (DVT).

Claim 13. (Currently Amended) The method in accordance with claim 11, ~~characterised in that~~
wherein the image data is recorded with a C-arch, which is rotated around the object.

Claim 14. (Currently Amended) The method in accordance with claim 1, ~~characterised in that~~
wherein the detail image is generated with direct or indirect recourse to the image data, which is
collected in a second data record, wherein this image data originates from another recording of the
object.

Claim 15. (Currently Amended) The method in accordance with claim 14, wherein characterised
~~in that~~ the image data of the second data record is recorded with another device, at another time, or with
different device parameters.

Claim 16. (Currently Amended) A system for image presentation~~carrying out the method in~~
~~accordance with claim 1, characterised by which comprises~~

a computer with access to the image data (1) that represents a three-dimensional object (7) in
space

a computer readable medium comprising, wherein a program that which extracts multiple cross-
sectional images in different planes from the image data and superimposes them to form a two-
dimensional on the projection (6) of the object is executed on the computer,

a monitor on which the projection (6) can be displayed, and

a computer readable medium comprising a program for selecting means that enables the user to
define a sub-area (8) within the projection (6), which can also be displayed on the monitor,

wherein the program includes a function that generates a detail image (9) via indirect or direct
recourse to the image data (1), wherein the detail image (9) has different information content than the
projection (6) and is displayed on the monitor inside the sub-area (8).

Claim 17. (Currently Amended) The system in accordance with claim 16, further comprising
means for selecting a detail image (9) from a plurality of such images characterised by means with which
~~the user selects one among several.~~

Claim 18. (Canceled)

Claim 19. (New) The system according to claim 17, wherein the means is a mouse, a trackball or a
joystick.

Claim 20. (New) The method of claim 3 wherein said information content is the depth, or
perspective, or type of display or the depth of information represented by the detail image.

Claim 21. (New) The method of claim 1 wherein said image data represents dental images.